ABC APPLES B.C. NEWS
SEPTEMBER 1989 $2.00

Apple increases standard memory of Apple II-GS

CUPERTINO, California—Apple Computer, Inc. has announced that it has increased the memory that comes standard with its Apple II-GS computer, offering greater value to new Apple II-GS customers for no additional charge.

"This change continues to demonstrate Apples commitment to provide enhancements that improve the Apple II computing experience," said Jean-Louis Gassee, president of Apple Products. "Together with the new Apple II-GS System Software 5.0, first available last month, the new Apple II-GS provides a much more robust platform for current and future software applications. Customers will find the Apple II-GS faster, more responsive and more capable than ever before."

The Apple II-GS now comes with 1 megabyte (technically, 1.125 megabytes) of random-access memory (RAM) and 256K of read-only memory (ROM) — rather than the 512K RAM and 128K ROM in the Apple II-GS it replaces. With 1 megabyte of RAM standard, the computer will operate on the AppleTalk network system and handle larger documents and more sophisticated applications without the need for added memory. Additionally, some features of the new System Software 5.0 have been included in the computers ROM, providing developers more efficient access to system tools. The new Apple II-GS is compatible with hardware and software designed for previous Apple II-GS computers.

Developers welcome new GS

Prominent Apple II-GS developers are pleased with the new 1-megabyte unit and the type of applications it supports. "The value of the Apple II-GS has been enhanced tremendously," said Stan Roach, vice president, Activision Presentation Tools. "Apple is responding to the needs of users and developers by introducing this new machine."

Roger Wagner, president of Roger Wagner Publishing, Inc., commented, "The new Apple II-GS with System Software 5.0 is real evidence of Apples continuing support for the Apple II. The new standard memory and system software significantly improve the speed and performance of an already powerful machine. Combined with the new Apple II Video Overlay Card, the system provides a perfect environment for sophisticated applications like our HyperStudio hypermedia system."

"The Apple II-GS and System Software 5.0 provide the memory and speed customers and developers want," said Jordan Sachs, vice president and general manager of Britannica Software, publishers of the popular Designasaurus and Jigsaw applications. "Designasaurus, as well as our new programs Revolution T76 and Laser Force require the greater memory that is now standard. With it, we can maximize the potential of our applications, providing more information and making them more challenging."

Additional features

Several other changes have been made to the Apple II-GS. Specific slots must no longer be dedicated to specific uses, so there are effectively more slots available for custom configurations. Additionally, a new logic board design produces minor improvements to the computers sound.

Other enhancements for people with disabilities allow them to manipulate the mouse and use the keyboard more easily. A new "sticky keys" feature enables users to activate several keys simultaneously with single keystrokes. Additionally, users who have difficulty moving the mouse may increase the computers responsiveness to mouse movements and may control more functions from the keyboard rather than the mouse.

Upgrade path

The recommended upgrade path from the current Apple II-GS 512K is to add memory (available in 256K increments) and install System Software 5.0.

Many Apple II-GS customers have already added memory to their machines and will obtain about 90 percent of the new machines functionality by installing the new system software. Apple is not offering an upgrade kit because the required logic board replacement is not cost effective for customers.

Apples B.C. 4th Annual Barbecue a resounding success – again

The Fourth Annual Apples B.C. Barbecue and Picnic was held at the Barnet Marine Park on August 13th 1989. Once again it was a resounding success.

About 50 members and their families showed up. The weather was very similar to last year, overcast but no rain. Lorne and Joan Walton were the driving force behind the event, coordinating everything and making sure all the helpers knew what to do.

Brian McCaig provided the barbeque and did the cooking. When he ran out of charcoal he used the dried up burgers to cook with. Bob Cotter was once again in charge of the door prizes. I have often wondered how the Cotters ended up with the most prizes the last few years.

Dave Martyn was busy praying in between his trips to the prize booth. I know he wasn't praying for me seeing as I didn't win a prize. Good thing he brought the station wagon to carry home all the booty.

Our trusty editor Ib is getting more and more like the Godfather each year. He showed up late and left early just stopping briefly with each member to say a few words. Of course his 'Hitman' Steve had a prior engagement this year and couldn't be there. Rumour has it he was sitting on the Courthouse steps waiting for a demonstration to erupt.

One teacher who shall remain anonymous did all his calculations right and bought an extra couple of tickets when he found out how many door prizes there were. What is it you teach Kit?

The Martell entourage made their presence felt by arriving late with the meat making everyone very anxious. Our illustrious Pres was there assuring everyone that the Martells were on their way and promising full refunds to all if the meat failed to show.

Special thanks go to everyone who helped and to Apple Canada and User Group Services for the prizes and the banner.

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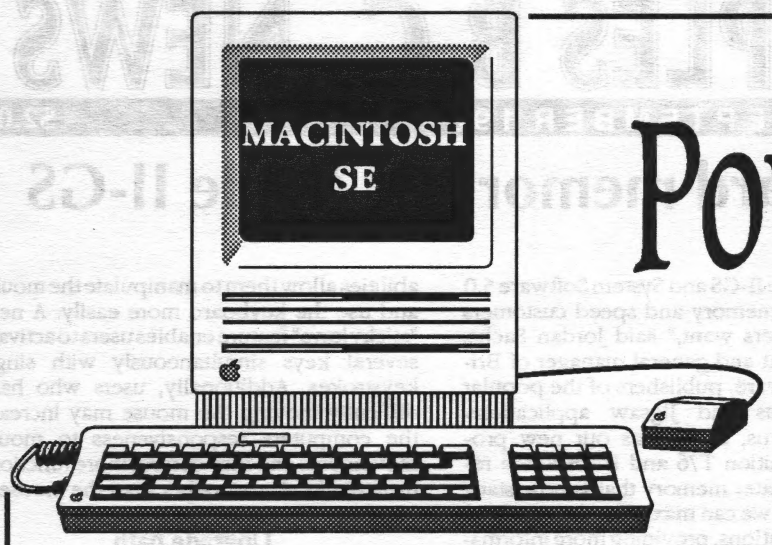

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MEMBERSHIP: Annual dues are $35. Application forms available from Apple dealers advertising in this publication.

Apples B.C. BBS (Information System): 525-3089. Access to members of Apples B.C. only. SYSOP: David Martyn; Assisting: Lorne Walton, Kit Doan.

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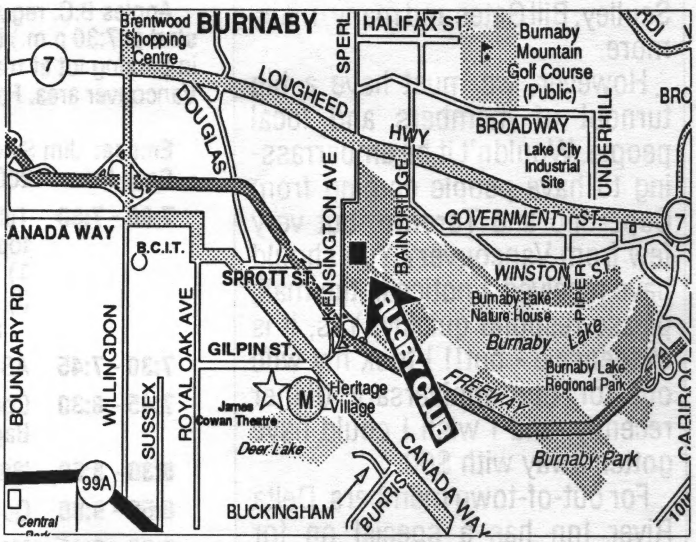
NOTICE BOARD

Mac meeting: September 26, 7:30 p.m., 990 W. 59th Ave. Vancouver, Marpole-Oakridge Centre 2nd floor.



Apple // meeting: (Burnaby Lake Club House) Regular meeting is scheduled for September 11. Starting time is 7:30 p.m.

SEPTEMBER						
S	M	T	W	Th	F	S
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3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Apple // meeting — Sept. 11 at the Burnaby Lake Clubhouse. Starting time 7:30 pm.

Macintosh regular meeting —Sept 26 at the Marpole-Oakridge Community Centre. Starting time 7:30 p.m.

Executive meeting — Sept. 13 at Marty Summers' place. Phone an exec member ahead of time if you wish to attend.

10th anniversary bash set for October 21

The date is set, the place is reserved and the whole world has been invited. The date: October 21st - the place: Delta River Inn, 3500 Cessna Drive, Richmond, B.C.

Now it is up to you if this is going to be a success. Invitations have gone out to such people as Steve Wozniak, Andy Hertzfelt, John Sculley, Bill Gates and many, many more.

However, we must have a big turnout of members and local people. Wouldn't it be embarrassing to have people coming from Cupertino and Toronto, but very few from Vancouver? You should have received a notice in the mail, please respond quickly. Yes, it is exspensive - but!! I took my wife out for our anniversary dinner recently, and I wish I could have gotten away with $60.

For out-of-town members, Delta River Inn has a special on for rooms.

—Ib Thorsteinsson

Club Page

What are we here for?

By Steve St-Laurent
Corresponding Curmudgeon

No, it wasn't lost in the mail. There was no August issue of *Apples B.C. News*. Yes, there was much moaning from some members, but there was never really any doubt about August appearing.

There wasn't enough material to fill the pages, not even some art to blow up and fill the holes. The newsletter you're now reading has no fewer than three Apple Computer press releases; one is about two months old.

("Jimmy's goin' to the nuthouse and mah mascara is runnin ...")

Folks, this is more than a plea – it borders on a lament. We need your contributions. If we're reduced to running Apple bumf and reprints from other clubs' newsletters, maybe it's time to ask if the newsletter has outlived its usefulness.

Let's be more specific. The Apple // contingent has been churning out a lot of words, but the stuff is hard to make readable for lack of graphics. We have not had a lot of success so far in bringing over // artwork to the Mac. Anyone care to take on that little task?

The Mac group ... ahh, the Mac group. We had only a handful out a few months back for a fascinating demo of Mac MIDI with the folks from Roland and their DX-7. This issue the only local Mac content is my toying with MultiClip on page 13. And let's not even talk about the sharp decline in Mac membership.

This is what we've sunk to, folks.

Through the efforts of Jim Swenor and Bob Cotter, a new meeting location and night have been secured *(Look left for details.)* Byte Computers has tossed in a 1200-baud modem as a door prize to stir a little interest.

But will people attend? And are there folks willing to pitch in on organizing meetings and, ah, contributing to the newsletter?

Bob Cotter, the club's vice-president (Mac), agrees the Mac group's fate will be decided in the next few months. Just before the summer break he mused aloud about the soundness of referring new Mac users to Apples B.C. rather than to MacWest.

A club such as ABC arises from a shared interest. And, lest I tread on the Rev's turf, the heart of sharing is giving. Apples B.C. needs some steady, reliable givers.

(... and to each contributor we're offering a three-day time-share in Heritage Hotsprings Hothouse, the waterslide theme park where the emphasis is on FA-MI-LY.)

MAC MEETING AGENDA

Apples B.C. regular monthly Macintosh members' meeting (NOTE: Formal proceedings start at 7:30 p.m.) Location: Marpole-Oakridge Community Centre, 2nd floor (free parking in parking lot at rear and on-street) 990 W. 59th Ave (corner of Oak St. & W 59th) South Vancouver area. Fourth Tuesday, September 26, 1989

Emcee: Jim Swenor
Door Prize: 1200-baud modem donated by Byte Computers

7:00 - 7:30	Table top displays - a Mac placed on individual tables dedicated to specific topics: 1) Public Domain Library, 2) ABCCS memberships, 3) Beginner corner. Entirely informal, a chance to ask or answer questions member-to-member.
7:30 - 7:45	ABCCS Society news, announcements
7:45 - 8:30	Connectivity with the Mac/news on Sys. 7.0 presentation: explained by Jim Baglot, Computerland representative
8:30 - 8:50	'89 August MacWorld reports from attendees
8:50 - 9:00	Questions/Answers
9:00 - 9:40	Mac diskette library update – John Spraggs, librarian. Mini copy session
9:40 - 9:55	Wind-down of meeting, last minute comments,etc.

High-density drive upgrade available for Mac SE

The August 1 Apple new product information guide announced the change from 800K to 1.4 MB 3.5 inch floppy drives for the 68020 equipped Mac SE. The product should be available at the dealer now. This change makes the Mac SE consistent with the recently released Mac SE/30 which included the FDHD internal drive, a drive that is capable of reading and writing 400K, 800K and 1.4 MB Mac, 800K ProDOS/SOS, and 720 K or 1.44M MSDOS disks. ProDOS/SOS and MSDOS FILES are available through Apple File Exchange (AFE), MSDOS programs cannot be run on 680x0 machines since the instruction set is incompatible with the 80x8x processors without emulator programs or boards.

An Apple FDHD internal drive upgrade is available (M6052) for 800K internal drive equipped SEs but must be installed by a Certified Apple Service Technician. The upgrade kit consists of an FDHD internal drive, set of Mac SE ROMs, SWIM (Super Integrated Woz Machine) and current system software (version 6.0.3 or later). The interface is the same as the current 800K drive. No mention is made of what happens to the old drive (what happened to all those 400K internal drives from upgraded 128K and 512K Macs?), it may have to be returned by the dealer as an exchange part.

Other upgrades available include: M0247PA (internal FDHD) and M0713 (SE/30 logic board upgrade) to change the SE into an SE/30; M6051 (internal FDHD, set of 4 ROMS, SWIM, current system software) for the Mac II; or M0247PA (by itself) for the Mac IIx.

The SWIM disk controller chip is described as being a superset of the existing IWM (integrate Woz machine) which is present in both Apple II and Mac family lines. IWM uses group coded recording (GRC) which encodes timing marks (used to tell the drive where the heads are on the disk) in the data, is a more efficient technique for storing data but requires more complex circuitry to simultaneously decode the data and timing marks (explained in Beneath Apple DOS/ProDOS, I think), which may explain some of the pricing differential between Apple and MSDOS drives. Modified frequency modulation (MFM) used in MSDOS machines physically separates the timing marks from the data stored on the disk. Both the IWM and a separate MFM controller are apparently embedded in the SWIM chip with formatting and detection of recorded format being performed automatically. AFE handles the differences in file systems and file formats. No mention was made of availability of SWIM or FDHD for the Apple II series.

Genealogy

Quite a few of you have listed genealogy as one of the things that you are doing with your computer. How about a letter or an article so that the rest of us can find out more about this subject? Perhaps Larry Davis will send us something from Mexico?

The August issue of the Sandy Apple Press (San Diego) gives some tips on how to start in the U.S. The author suggests using your birth certificate and your parents marriage certificate as a good place to start. The Everton "Handy book for genealogists" is suggested as an excellent source for addresses to find further information.

Are there Canadian sources of this sort of information, and how hard is it to get?

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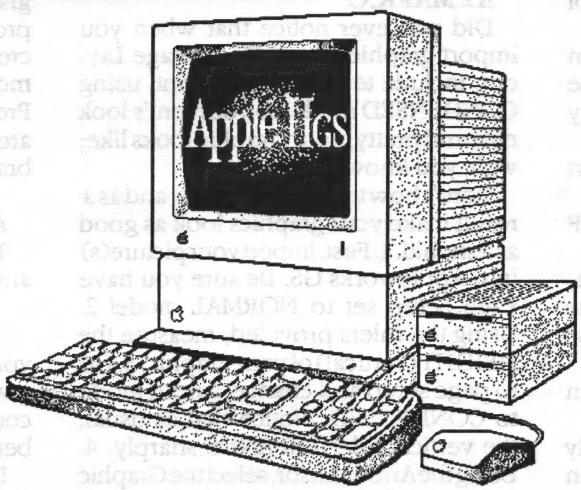

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AppleWorks GS: the ongoing review

By Lorne Walton

LORNE'S CORNER

This is not a full review AwGS' Page Layout. After all these months, I must confess that I rarely use AppleWorks GS, and that I presently have no use for desktop publishing.

PL is where AppleWorks GS "brings it all together". Particularly, the word processor and graphics modules join hands here to give you the power to produce something that looks professional.

Well, sort of. It must take more than a bit of practice to arrive at something that looks "professional" on an ImageWriter. Undoubtedly it would look better if printed on a LaserWriter. Other printers? Don't ask.

At first glance, the feel and concept of this package are overwhelming. At second glance, they are marvellous. The output can be impressive, in appearance if not speed. Or so I'm told...

On third glance, this complex package is the one module of AwGS 1.0v2 that seems to still hold some unpleasant surprises. InCider's July example admonishes the user to save his work frequently.

While this is always good advice, one wonders if it reflects a bad experience with AwGS' PL module. Following the magazine's example, I was confronted with recurring glitches: text that unexpectedly changed size, colour, and even font, overflowed its margins, and overprinted other text. And arguably the most serious system error of all, $0681 (damaged event queue), requiring the whole system to be shut down.

A later attempt at doing much the same thing was a success from a software viewpoint (no bugs) but not an artistic one. I used "Normal" (as opposed to "Condensed") setting from the Page Setup menu, and "Better Text" from the Print menu, and ended up with a three-column page of nice graphics but very blocky text.

If I had a real reason for wanting to learn how to do page layout, I might have stuck it out and made some sense of it all. Read the accompanying "tips" from GEnie.

I would be most appreciative if another member would write the 'definitive' review and in the process, enlighten me as to how to make it do tricks.

Comments re AwGS' page layout module

Edited by Lorne Walton

The following remarks are from GEnie. A2.MARK.C is one of the sysops of GEnie's A2 forum; he is possibly the number one resource person on the subject of GS fonts, and is the author of FONTDOCTOR, a public domain editor for GS-type fonts. LINEFEED and D.W.WALKER are knowledgeable users who frequent the forum.

LINEFEED:

The best way to import 320-mode pictures into AWGS' page layout module and either retain the correct palette or convert it to the proper greyscale:

1) Get a copy of SHR Convert from Jason Harper. Be sure to send him the shareware fee. [It is in the ABCCS Library and on the BBS.]

2) Load the picture you want to import into SHR Convert.

3) Save the picture AS-IS into the GIF format.

4) Load the GIF picture into SHR Convert, selecting 640-mode and the palette option (calculated or greyscale) you want.

5) Save the un-GIFed picture as an Apple-preferred $C0 file.

The picture will now import properly into the AWGS program. The change in aspect ratio coincides with the "compressed" printing mode.

A2.MARK.C:

Appleworks GS DTP module is the best [Apple // DTP program] I have yet seen. It handles functions very similarly to the way Pagemaker on the Mac does so. Mind you, it is still slower than I would like, but on the whole it runs about 5% slower (these are objective feelings only!) than PM on a Mac Plus. It has a first rate user interface - makes text flow, columns, etc. a pleasure to place - all objects (text blocks are treated as objects, by the way) are a pleasure to work with - you are **not** locked in once you lay something down the first time.

A2.MARK.C:

Did you ever notice that when you import graphics into AW-GS Page Layout, include text, and then print, using CONDENSED mode, so your font's look nice and pretty, your Graphic looks like; well, you know what I mean.

Here's how to get around this, and as a result make your graphics look as good as it should. 1. First, import your picture(s) into Appleworks GS. Be sure you have Page Setup set to_NORMAL mode! 2. Using the rulers provided, measure the HEIGHT (vertical) of your graphic. 3. Go to page setup and change output mode to CONDENSED. Notice that as usual, the vertical ruler EXPANDS sharply. 4. Using the Arrow cursor, select the Graphic (the corner handles will appear). 5. Still using the Arrow cursor, drag the lower left handle of the graphic down to the measurement on the RULER that you had measured in 2.

You have just stretched your graphic out to approximately double the height. In doing so, you are compensating for the Imagewriter driver, which converts Apple IIGS SHR pixels from 5:12 ratio to 1:1, giving the better text quality. By stretching the graphic in the same way, you restore its appearance to normal.

LINEFEED:

If you want the final graphic [imported from another paint program] to have the proper colors, you need to create it with the proper palette. MSGS came with the correct pallettes for all of the popular graphics program. These are easy to produce, and I'll jump over to PWG and create pallete files for the three filetypes most often used ($C1, $C0, both Apple Preferred and PaintWorks format). [These are now available in the club's PD Library.]

A2.MARK.C:

To get the best output from AW-GS (or any GS Font Based Program):

1. Use Condensed Mode.
2. Select "Better Text". That will give you Imagewriter output that will blow away other [Apple // DTP] programs. Of course, using a Laserwriter works MUCH better yet!

In "Normal" (non-Condensed) mode, the fonts print out pretty poorly - but that is simply because the fonts are designed to work using a 1:1 layout, since they were designed for the Mac. The "Normal" 5:12 format makes them look not

● *continued next page*

The A2 Central Developer Conference

By Lorne Walton

I was pleased to attend this conference hosted by **Tom Weishaar** and his staff in Kansas City, in July. About 140 people attended, of whom 20 were sent by Apple. These are the people at Apple who are enthusiastic about the // line, and have been working hard on System 5.0. The majority of the attendees were developers of Apple // software, with a handful of hobbyists also present.

Apple's marketing policies as they affect the // line were slammed in a big way in one of the sessions. Repeatedly the Apple panelists were told that they don't have enough faith in the Apple // line, and if they do, why don't they convince Apple to push it as business machines? These reps did give the impression of being resigned to a shrinking school/home market for their product. The upshot of this session was the formation of a new developers' organization headed by the vociferous **Barney Stone** and cooler heads like **Roger Wagner**, **Tom Weishaar** and **Mark Simonsen**.

● *continued from page 6*

only too tall, but too chunky, since the IW driver compensates by doubling up vertically for every pixel.

LINEFEED:

And remember, when using "better text" mode, you will not see any improvement unless you have a font of double the size you use (ie: for 12/24 you need to have 12/24/48 in your folder - the 12 is for display only)

D.W.WALKER:

The Macintosh screen has "square" pixels and maps to the printer more or less exactly, so the fonts that look right on the screen also print right. The IIgs screen has "tall" pixels — that is, the height:width ratio is about 12:5, so the normal Macintosh fonts look too tall and skinny on the screen. The "condensed" printer mode translates them back to the original 1:1 ratio, so they look as intended on paper; but it also squeezes everything in the print port to 5/12 of its apparent on-screen height.

When a IIgs font editor is available that allows creation of new fonts (Font Doctor, recently uploaded, only allows editing of an existing font, in its existing size), we'll probably see some fonts designed to look good on the screen and to print properly without the "condensed" mode; but it will be a while yet.

A2.MARK.C:

FontDoctor 1.0B6 will let you expand and contract characters within a font now... also should include a "Font Doubler" option that will build a double size font base which you will be able to dress up for better detail, exactly for the reasons you give above. It will also let you create new fonts from scratch! [FONTDOCTOR also is available from the PD Library and the BBS.]

The keynote address was given by **Bill Mensch**, whose Western Design Centre developed the 6502 and its offspring. Mensch reminded us that the 65832 is "just around the corner", that the sky is the limit for the 65xxx technology, and that 100 MHz 65816 chips are quite possible. He is a visionary, but one wonders whether his vision is less than 20/20. He boasted that he could arrange generous financial backing for developers to produce GS compilers for such languages as Fortran and Cobol, which would promote the GS in the eyes of engineers and businessmen.

System 5.0 Tips & Tricks

Most of us will have seen the demo of 5.0 by **Andy Bridges** last Spring, so we already know about faster loading, snappier windows and graphics, new tools, etc.

A word about the new graphic version of the Control Panel: this NDA may be deleted like any other from your SYSTEM/DESK.ACCS folder, but if it is, you'll have no way to reset the GS/OS cache size nor to change printers. Other CP functions may still be performed by the CDA version built in to the GS.

The session "GS Programming Considerations" contained a few useful pearls about System 5.0:

(1) ICONS: Don't mess with the FINDER.ICONS file on 5.0. If you use an icon editor to add a duplicate icon or change an icon's application name, auxtype or filetype, FINDER will likely crash. You may, however, alter the shape or colour of the icons.

The FINDER.ICONS.X file is not loaded into machines that have limited memory. 5.0 is not so fussy about you changing these icons.

By the way, FINDER scans the icon files in its ICONS folder in this order: FINDER.ICONS, then FINDER.ICONS.X, and then your own icons files in the order that they appear in the folder. The icon that FINDER displays will be the LAST one fitting the name/type/auxtype criteria, that FINDER encounters in its scan.

(2) Bug: There is a missing "RTS" in 5.0's BASIC.SYSTEM 1.3; if 1.3 is active and an attempt is made to BLOAD a file into a "protected" area of memory, then instead of an "Out of Memory" message, a memory segment will be BSAVED to disk, wiping out part of the disk.

(3) Copying files: 5.0 is the first system to employ extended filetypes, i.e. files that include a resource fork.

Be aware that when copying these files, you must use 5.0's filecopy routine and not 4.0's (or Copy][+ or ProSel 16. If you use the latter to copy 5.0 to another volume, the volume will not boot. There is no problem when using disk copy programs.

(4) ProSel 16 bug? Apple II Developer Tech Support advises that we NOT use ProSel 16's filecopy command with 5.0. It does block-read/write calls in the middle of a "session", a no-no which causes the cache to be zeroed. Hopefully **Glen Bredon** is about to hand us a fix for this problem.

Easter Eggs

(1) Press any key while System 5.0 is being booted, before the graphic screen appears. You'll get a similar text screen to what you saw with 4.0; the version of GS/OS is "03.00".

(2) Hold down Option-Apple while you boot, and "Expressload" appears beneath the thermometer bar.

(3) While in FINDER, pull down the Apple Menu, and as before, you'll see "About the Finder". Now pull it down again, while holding down Shift-Option.

Coming soon to a meeting near you...

All 18 of the seminars were videotaped, and I'm happy to report that the ABCCS executive has approved the purchase of six of those tapes.

The conference was a bargain at US$300, including all meals and accommodations at the dorm of a small college south of KC.

We were treated by Apple to pizza and beverages the first night, by Laser to nice hors d'oeuvres the second, and by Western Design to a Royals baseball game the third.

I came home with good memories, and fourteen 3.5" disks for the GS Library, full of fonts and font utilities, plus the two disks that make up System 5.0. Oh yes, and a super new disk copying program named SPEEDYSMITH, which will be available in the PD Library.

MusicWriter for the II-GS

Pygraphics
PO Box 639
Grapevine,
Texas 76051

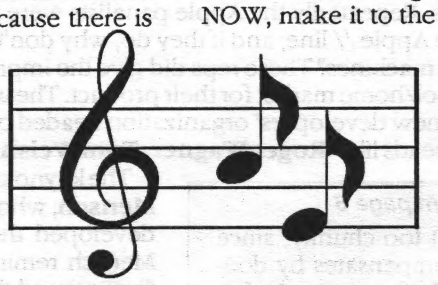
By Marty Summers

MARTY SUMMERS

The Apple II-GS was introduced in the fall of 1986 and was touted as having great graphics and sound. The graphics ARE quite good and the sounds generated by the ENSONIQ synthesizer chip on the mother board are not bad. I would not recommend the II-GS as a recording studio, state of the art computer, but I would suggest that it can be put to good use as a tool for music composition.

With the introduction of MusicWriter, (easily the equivalent of Deluxe Music Construction Set for the Mac and/or the Amiga) the II-GS can now be used to write music (input by mouse or MIDI keyboard) and print music (up to a full 32 staff score!) The quality of printed music is very high on a dot-matrix Imagewriter II printer and even better on a Laserwriter.

While you are composing, you can at any time have the computer play your composition for you, with as many as 15 different notes, and/or sounds at a time. The software assigns one sound per staff, so if you have 15 staves, each with one line of music, MusicWriter allows you to hear 15 different sounds at THE SAME TIME! For example, you could write a jazz band chart putting all five sax parts on the top staff, four trumpet parts on the second staff, four trombone parts on the third staff, piano and guitar chords (you can put text anywhere) on the fourth staff, and the bass line on the fifth staff. The percussion part can be written on the sixth staff, but because there is only one sound per staff this part will not do justice as a "drum set". (It will however LOOK like a drum part when printed!)



Music Writer rated a good working tool for the //gs.

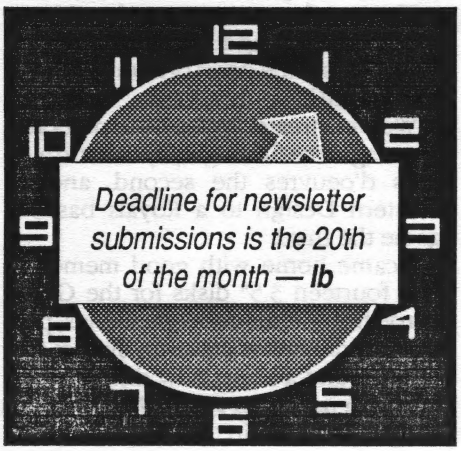
When you play back the chart you can listen to all the horn parts, or any other combination of parts up to the limit of 15, AT THE SAME TIME, with sounds that will be close to the recognized acoustic sounds for those instruments. There are any number of ways to use MusicWriter. My wife is an elementary music specialist who, among her many other jobs, teaches grade six and seven concert band. Our school district holds a festival every spring which showcases soloists and small ensembles. I had just arranged the main theme from Brahms' first symphony, last movement, for clarinet trio to use with two of my private clarinet students, when my wife (after hearing the computer play the composition) asked if she could use the trio at school for the solo and ensemble festival. I said "sure". Then she asked of I could rewrite it for two clarinets and french horn. In ten minutes I had a printed copy of the "new" trio for two clarinets and french horn. She came home the next afternoon and told me the horn player, who had a conflict, had been replaced by a trombone player. No problem, another ten minutes and I had the "newer" trio.

Two days later my wife matter-of-factly informed me that the horn player was back in the group as he could, NOW, make it to the festival. This time it took me twenty minutes to add a fourth part and print out the "newest" quartet. At this time of year (July) I can be found teaching instrumental music as part of the Summer Program in the Langley School District. I have just started to write and print the melody and chords for some of the Jazz Standards, which will be used in our Jazz Combo program.

I find that mouse entry is as fast as I can write the music by hand. The best part is transposition. It takes only ten seconds to have the computer turn a "C" treble clef part into a piece of music for any Jazz Combo instrument.

Each instrumental student enrolled in the Summer Program will have an opportunity to get acquainted with MusicWriter and its companion program, the Instrument Designer. (also by Pyware - this program allows you to SEE and HEAR how modifications to sound waves affect sound. Any sound created can be loaded into MusicWriter)

This fall I will be working with MusicWriter and Instrument Designer, along with my students.



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Using Epson printers with AppleWorks

Submitted by Mike Millard.

(This write-up is taken from a book of "Application Notes" enclosed with a new Epson printer we bought recently for work. This section relates to using Epson printers - or other models that emulate an Epson printer - with "classic" AppleWorks.)

Getting Started:

To use AppleWorks with your Epson printer, you must specify which type of printer you are using. The Printer Information menus let you select up to three printers from the list of printers AppleWorks supports. To select a printer, follow these steps:

1. From the Main Menu, select the "Other Activities" option.
2. Select the "Specify information about your printer(s)" option to display the printer Information menu.
3. Select the "Add a printer" option. The screen displays a list of the printers that AppleWorks supports.
4. Select a printer. The following chart shows you which AppleWorks selection to make based on which Epson printer you have.

Printer selection: AppleWorks	
MX series:	Epson MX series
MX series with Graftrax+	Epson MX/Graftrax+
RX series	Epson RX series
FX series	Epson FX series
EX, JX, LX, LQ and SQ series	Epson FX series

5. After you make your selection, name your printer anything you like.
6. Tell AppleWorks how your printer is connected to your computer. If you have a computer with a built-in disc drive and one printer port (e.g. IIc), specify "slot 1" (this is the same as port 1). For other types of Apple II computers, specify the slot in which your printer interface card is installed.
7. On the next screen that appears, change any settings that are not right for your printer. (For example, you may need to change the platen width to match the width of your printer - 80 columns or 136 columns.)
8. Repeat the preceding steps for each printer you wish to select (the maximum is three).
9. Now select which printer you wish to use whenever you perform screen dumps (that is, whenever you print your screen by pressing Open-Apple-H. To do this, perform the first two steps above, select the "Open-Apple-H printer" option, and then select a printer from among those you have just defined).

Selecting Print Features

AppleWorks makes selecting print features easy. The "printer Options" screen provides a complete list of all the print features AppleWorks supports. To select print features, follow these steps:

1. Move your cursor to the place in your document where you want the print feature to start.
2. Press Open-Apple-O. The "Printer Options" screen appears. This screen lists all the print features you can select.
3. Type the two-letter code for each feature you want, and then press RETURN. Repeat this for all the print features you want to select.
4. After you select all the features you want, press ESC to leave the "Printer Options" display.

Note: When you select an option that turns on a print feature, such as "Boldface Begin", the print feature applies to the rest of your text until you turn off the feature (in this case, by selecting "Boldface End").

Commonly-Asked Questions

Q. What type-styles, such as emphasized print or proportional spacing, are available with AppleWorks?

A. The "Tips on printers" chapter in the "Using AppleWorks" manual describes the printer features AppleWorks supports. The following table lists the features AppleWorks supports on Epson printers:

Printer	Emp	SS	UL	LS	PS	Pitch
MX series	Y	N	Y	Y	N	5,8,10,17
MX/Graftrax	Y	Y	Y	Y	N	5,8,10,17
RX series	Y	Y	Y	Y	N	5,6,8,10,12,17
FX series	Y	Y	Y	Y	Y	5,6,8,10,12,17

Emp = emphasized (bold)SS = Superscript/SubscriptUL = UnderlineLS = Line spacing of 6 & 8 lines/inchPS = Proportional Spacing.

Q. How can I take advantage of printer features that AppleWorks doesn't support, such as NLQ (near-letter quality)?

A. AppleWorks has three pairs of printer codes that it usually uses for boldface, superscript and subscript. You can, however, use these printer codes for anything you like. For example, you may wish to use the "Boldface Begin" option to turn NLQ on, and the "Boldface End" option to turn it off.

To change the use of these printer options, you must add what AppleWorks calls a "custom printer" to the list of printers. This lets you specify what codes are sent to the printer in place of the boldface, superscript and subscript options.

To create a custom printer, you must tell AppleWorks the codes for all printer functions, even the ones you can't change. The following table shows which codes to enter:

Function	Value	Codes		
Characters per inch	5	Ctrl-R Esc P Esc W1		
	6	Ctrl-R Esc M Esc W1		
	8	Esc P Ctrl-O Esc W1		
	10	Ctrl-R Esc W0 Esc P		
	12	Ctrl-R Esc W0 Esc M		
	17	Esc P Esc W0 Ctrl-O		
Lines per inch	6	Esc 2		
	8	Esc 0		
Boldface	Begin	Optional	End	Optional
Superscript	Begin	Optional	End	Optional
Subscript	Begin	Optional	End	Optional
Underlining(*)	Begin	Esc -1	End	Esc -0

(*)Choose "option 2"

Press the ESC key to enter an Esc, and hold down the CONTROL key while you press the O or R key to enter the Ctrl-O or Ctrl-R codes. Do not type any spaces when entering codes.

When you are through entering a command (a series of codes that performs a function), press the ^ key to signal to AppleWorks that you are done. Do **not** press RETURN.

Look up the print features you want to use in your printer manual's Command Summary to see which codes you need for the optional entries.

The procedure for creating a custom printer is described in detail in the "Using Printers" chapter of the "Using AppleWorks" manual.

P-T-P v3.0, a good program gets better

By David Martyn

It was five years ago now that I moved down from northern B.C. leaving behind the Skeena Apple Programmers (S.A.P.) users group and my local computer dealer. So I set off to find a new dealer and walked into the new Advantage computer store on Kingsway. It was great to see **Barry Cotter** and **Dave Zacks** whom I had met before, but even then they were rushing around. So I walked over to watch a bearded gentleman who was using a program with the name Point-to-Point. To this date I had been struggling with Ascii Express and this program looked as easy to use as AppleWorks.

The man left and I asked a now free Barry Cotter "who was that bearded man?" "Our lawyer," he replied "who is also a Apple // programmer - **Gary Little**." Gary Little is a founding member of the Apples BC Computer Society and of SAGE (Serious Apple Group, Eh!). In addition to creating **Point-to-Point** he was also the developer of the international Binary][file format standard. Well, Gary left British Columbia (he is still a member of Apples BC) to work for the now defunct A+ magazine and currently works in the Development Tools group at Apple Computer.

Point-to-Point was formerly published by PinPoint who no longer produce Apple // software. Knowing a good program when they see it, **Beagle Bros Inc.** bought Point-to-Point and have released version 3.0. Point-to-Point has been reviewed in "Apples B.C. News" before, so this review will concentrate on the new features. But first a quick review of the standard features.

Point-to-Point works on a 128K Apple //e, //c, //c+ and the IIgs. The interface is modeled after the AppleWorks filecard system. There can be up to 16 different macros for each of 16 telephone numbers. Standard file functions include saving, loading, deleting, and renaming files, cataloging the disk and creating subdirectories. You can print the memory buffer, a text file, or an AppleWorks word processing file from within Point-to-Point. Any portion of the 16,000 character memory buffer can be selected and sent to the print, a disk file or the modem. Disk files can be automatically converted to Binary][format during an Xmodem transfer. The supported hardware includes ten internal modems, thirteen external modems, seven printer cards and all ProDOS compatible clocks.

There is a new Beagle Bros (TimeOut type) manual. Those that have the Pin-Point version will appreciate the new manual that incorporates the manual supplements (2.0, 2.1, 2.2.1) that came with the original version. The manual is 145 pages, with a Table of Contents and Index. Five Appendices cover: Installing your modem, Pathnames, Directories and Prefixes, VT52 Emulation, ProDOS file Types and Example Macros. In typical Gary Little fashion the manual is completely descriptive and informative.

New with version 3.0 is the support of extra memory (including Applied Engineering and Checkmate boards). This means that Point-to-Point's review buffer will store up to 65,280 lines of text depending upon your memory. Support is given for those that might wish to Partition their Auxiliary Ram Drive as a Ram Disk.

You can now view the keyboard macros definitions in the Editor or Communications modes (⌘/Ⓐ-K). New macro commands can set the baud rate, send a long break signal, change the pathname and the download file name.

In addition to VT52 emulation Point-to-Point now supports VT100 and VT102. This is most welcome to users of MindLink and the university MTS systems.

In my last review I began by quoting the Point-to-Point supplement comment by Gary, "I'm always enhancing and improving Point-to-Point, usually in response to suggestions made by its thousands of users." I ended the article by asking for the ability to "copy logon macros from one telephone directory to another." Well, God bless you Gary Little, we can now cut and paste the macro definitions.

In the tradition of ending reviews with a wish list (Gary does read these) I would like to be able to change the cursor from the 'flashing box' (overstrike type) to the 'simple line' (insert type).

Point-to-Point lacks some of the features that power-hungry users receive with ProTerm: Ymodem protocol, printer formatting commands, "autolearn macros" and some enhanced edit buffer commands, to name a few. But for the casual user - none can beat it

A new virus for the Apple // – this one's called Lode Runner

Well folks, here it is installment number 3 in the Saga of the virus for the Apple II. First it was CyberAids, which wasn't all that great and was quickly defused. It was followed in June of 1988 by Festering Hate, a more sophisticated and deadly evolutionary offspring of CyberAids. F.H. spread rapidly throughout the Apple II world and was particularly insidious as it infected (usually) the first SYSTEM file in the root directory, usually Basic.System, would infect more than one file per disk, would infect files in sub-directories, and when it 'went off' would destroy all volumes currently on-line at the time. This included RAM disks and Hard Drives!

By now, most of you are aware of Festering Hate and that there are several good virus detecting/protecting programs available that have virtually eradicated the FH virus. It is to the credit of the Apple II community in general, and selfless people like **Glen Bredon** that FH was halted before it got too far out of hand. As a matter of fact it was the very vehicle that spread the virus so rapidly that was also responsible for its quick demise. After I did my initial research on FH last year I wrote a brief study of it and uploaded the study to most of the active BBS's in Canada and the U.S. I also sent copies to Glen Bredon and others who acted very quickly to develop the 'cures'. But it was the massive telecommunications network of Apple II users that spread the details so quickly and stopped FH.

Now, number 3 virus has just appeared. Called, rather nostalgically, "LODE RUNNER", it is not quite as destructive as its predecessors but its a virus nonetheless. Here's what I've been able to pull together so far:

Source

Although we're not 100% positive it appears that the program called SPEEDY SMITH is the culprit. A recent import from France, Speedy Smith is one of the fastest copy programs for the IIgs. A full 800K disk copy takes about 50 seconds (without verification) to 70 seconds (with) using SS. It has an excellent SHR screen with 'thermometers' that indicate the copy's progress. Unfortunately the

● *continue next page*

This "Lode Runner" is not a game

● *continued from page 10*

reason we cannot either convict or acquit SS is that its creators have seen fit to invent their own DOS. This DOS is not readable by standard Apple II sector editors such as the one in Copy II Plus. There are several reasons, however, for suspecting Speedy Smith. First SS's displays are in French and the virus's text screens are as well. When catalogued Copy II+ indicates that there are 292 used Prodos blocks, but adding up the individual files' blocks only totals 148. And lastly, what better vehicle for the spread of a virus than a copy program?

How was it discovered?

Lode Runner was discovered almost by accident by several members of the Apples BC Computer Society. Shortly after receiving several new disks of IIgs software, including Speedy Smith, one member found that his Test Drive II refused to run. This was followed by backups and originals of Space Quest I and Police Quest.

At first it was thought that the member's IIgs was having hardware problems. But at the same time another friend from Eugene, Oregon contacted us about having seen a French hi-res screen appear on his monitor just before his Copy II+ disk was trashed. Not being Canadian he was only able to pick out the word "virus".

Armed with this info and the 'damaged' Space Quest disks I spent a weekend checking things out. At the same time other friends in Oregon & California were independently analyzing infected disks.

How to tell if your disks are infected

There are 4 ways of detecting Lode Runner:

1) When the virus "goes off" and erases your disk...not exactly the most desirable way,

2) If you have a copy of Space Quest I then you can use it to check all your disks. Boot any suspect disk and wait until the drive stops. Replace the disk with Space Quest and do the 3 or 4 fingered salute (⌘/Ⓒ-CTRL-RESET). NOTE: Keep Space Quest write protected so that it dosn't get screwed up. If Space Quest boots to the point where it asks you to press a joystick button then you can be pretty sure that the previous disk is OK. If Space Quest trashes with an error message (#206) then the previous disk is likely infected.

If you DO get an infected disk then you **must** either power down your IIgs or run the self-test before continuing with your testing to clear the RAM as the virus seems to install itself there.

3) A better check (and much faster) is to boot Copy II+ and run the 3.5" Sector Editor. Do a read of Block 0000 (Track 00, sector 00, side 01). If the first 3 bytes are 01 A9 50 then the disk is infected. Those 3 bytes aren't the only bytes that are different but they are all that is necessary to identify the virus.

4) If you recall, last year during the Festering Hate panic it was noted that one of the best ways to have an Apple II virus was in BLOCK (0) on any Prodos disk. At that point, anticipating another virus, Guy T. Rice wrote a small virus detector/fixer. If you put this program into the SYSTEM/SYSTEM.SETUP folder on IIgs disks then it would automatically detect and correct modifications to Block (0). Now for LODE RUNNER this will also work.. that is, it **will** detect LODE RUNNER and it will try to correct Block (0). **But**, it appears that due to the method of spreading of LR Guy's program cannot correct it. Every time you boot the disk it'll give you the virus detect error. I think the reason for this is that LR installs itself in RAM upon bootup in preparation for infecting a new disk.. and the only way you can be sure that its gone is to either power down or run the self-test.. and since Guy Rice's program does an auto-reboot and corrects the block (0) all in one step then the RAM never really clears and the virus re-infects the disk. And since you cannot write-protect the disk it becomes a vicious circle. I am going to try to get these observations to Guy Rice in the hopes that he can modify his program. NOTE: Three other problems with using Guy's program: its no good for 5.25" disks, it only works with a IIgs and it only works with disks that are bootable. LODE RUNNER can infect ANY Prodos disk because it resides in one of the blocks created when a disk is formatted.

There is a 5th way the friends in Eugene, Ore have written a Binary program to detect and disarm the virus and I will try to include it in this file when I upload it. The reason theirs is successful is that the detector is not part of the disk being checked and thus the "circle" is broken.

Method of spreading

As far as we can tell the virus is spread two ways: by being copied with a copy program and by booting an uninfected disk (using ⌘/Ⓒ-CTRL-RESET) immediately after running an infected disk. NOTE: For a disk to be infected it must not be write-protected. The virus does **not** infect actual files so none of your files will look modified in either their file length or their modified date.

The virus also does not search all drives, as did Festering Hate, so cannot be detected that way. Because it doesn't infect files it only infects one spot per disk and cannot destroy any sub-directories. Therefore your cannot get rid of the virus just by re-copying the files...the virus is actually part of the Prodos kernel created when the disk is formatted.

What happens when it goes off?

To get Lode Runner to "go off" you must set your Control Panel's clock to the following: the MONTH must be October, the DAY must be an odd numbered day and the minute must be a number divisable by 8. Next you must boot an infected disk then boot (using ⌘/Ⓒ-CTRL-RESET) any other disk. This second disk must **not** be write-protected or the virus won't activate.

Once the second disk is booted the virus will appear. Its a red screen with text characters as follows:

+++ SYSTEM FAILURE in : +++
08

and proceeds to count down to zero where the screen changes to another with a multi-colored scrolling background and the following text:

000E Copies. Distr:Artistes Associes

=== LOAD RUNNER ===

Premier virus NON-DESTRUCTEUR sur IIGS

par SUPER HACKER & SHYRKAN du MASTERS CRACKING SERVICE 1988 Lyon

By the time you've read the first screen the disk that you just booted has been rendered useless. LR does not appear to erase more than the current disk and doesn't seem to affect 5.25" disks.

Not being an expert in French I am unable to determine whether the phrase below the title means: "The first non-destructIVE virus for the IIgs" or "The first non-destructIBLE virus for the IIgs". This is a 'moot' point however as it **does** destroy one disk when it goes off. In addition, and I believe that the writers of LR didn't plan this, LR will destroy Space Quest 1 and Police Quest for the IIgs if they are booted **at any time** after an infected disk.. and if they are not write-protected. It is not necessary for LR to "go off" for these programs to be rendered useless. I have only found these two that behave in this fashion but I am sure there are more, likely most of the Sierra programs for the IIgs.

Apple cuts its ties to Adobe Systems

Submitted by Bob Cotter

CUPERTINO, California—Apple Computer, Inc. announced in July its intention to sell all of the 3,423,792 shares of Common Stock of Adobe Systems Incorporated that Apple currently holds, representing approximately 16.4 percent of Adobe's outstanding shares. Apple acquired the shares in November 1984 at an aggregate price of approximately $2.5 million, in connection with a product development arrangement between the companies. Based on the price of Adobe Stock on June 30, 1989, the shares have a current value of approximately $91 million.

Albert Eisenstat, senior vice president and secretary of Apple, stated, "Adobe's PostScript products have had a significant role in the success of Apple's Macintosh products, and our companies continue to have a mutually beneficial relationship. We are selling the shares principally to take advantage of the significant appreciation in Adobe Stock that has resulted from Adobe's success."

Apple indicated that it further believes that now is an appropriate time for Apple to sell its Adobe shares because Apple's current development directions are diverging from those of Adobe. Apple is developing certain technologies that are competitive with technologies of Adobe. On May 9, 1989, Apple announced to developers and the public plans for font software, which software is expected to be included in the next major release of Apple's Macintosh System Software.

Apple believes that this technology will offer to Macintosh users uniform font generation capabilities across a broad range of output devices, including screen displays, laser and non-laser printers and other devices. Apple is also in the process of negotiating directly with certain font trademark owners to obtain licenses for use on Apple computers, font software and printers of the owners' font trademarks, some of which are currently being utilized through a sublicense from Adobe.

Apple also indicated today that it is developing an alternative interpreter for the PostScript page description language used in certain of Apple's LaserWriter printers. Apple stated that it desires to have the flexibility to determine what additional features and enhancements should be provided in its PostScript language interpreter and to avoid the payment of license fees to Adobe on certain printer products. In all likelihood, any such PostScript interpreter alternative would initially be offered in new Apple printer products. Apple currently believes that its font software and interpreter could be available sometime between the spring of 1990 and the fall of 1990.

Apple believes that certain of its customers will continue to request the Adobe implementations on certain existing and future printer products, notwithstanding the availability of alternatives from Apple. For this reason, Apple currently intends to continue to support the Adobe interpreter and related technologies on such printer products, even if and after Apple offers its alternatives.

Apple believes that, to the extent it successfully produces and achieves customer acceptance for any of its alternatives to the PostScript interpreter, font software and related trademarks currently provided by Adobe, revenues to Adobe from Apple could, over a period of years, decrease substantially and eventually be eliminated. However, Apple believes that any decline in such revenues would be gradual.

Apple will be selling the shares to Morgan Stanley & Co. Incorporated and Hambrecht & Quist Incorporated for resale to the public in an underwritten offering.

GS RAM Plus Card postpones inevitable hard drive

By Lorne Walton

In the spring I purchased a 2 MB Applied Engineering GS RAM Plus Card, and recently I bought another 2 MB for my card.

What does one do with 4.25 MB of RAM in a GS? I've set up 2400K as a RAM disk, leaving 1952K of system RAM. My /RAM5 functions as my System (boot) disk and holds a large number of useful Desk Accessories as well as some of the applications I like to have close at hand. It contains both ProSel-16 and Finder, which I can switch between in seconds. It has eliminated the need for a second 3.5, and temporarily, a hard disk.

Advantages are lower cost than a hard disk, and greater speed.. Disadvantages: It is much smaller than any hard disk, there is some fiddling involved, and the RAM memory evaporates in the face of certain unusually pernicious system errors, power failures, and power-downs.

Pure reconstituted RAMdisk

I can now vouch for ProSel 16's Backup/Restore function because I use it to back up /RAM5 to three 3.5" floppies in less than 3 minutes with the press of a key, and restore it in about 5 minutes. This procedure is convenient enough to make it practical to back up the RAMdisk every day before powering down. However, if you use it only for applications that aren't often changed, this isn't necessary. If you often change your signon macros in your communications program, or printer definitions in AppleWorks, then it makes sense to leave those programs on 3.5 and select them from ProSel or Finder.

By the way, ProSel-16's Backup/Restore boasts a "Selective Backup" feature: you may extract a single file or group of files from the backup disks.

Setting up your RAM volume

(1) First select the size of your RAM disk in the control panel, leaving at least 1.25 MB (1280K) of system RAM, which several GS programs require. Power down [or do a simulated power-down with either (a) option-apple-control-reset to enter the GS Diagnostics, followed by control-reset, or (b) shift-apple-control-reset] to make the new RAM size stick. This needs to be done only once, since the setting is preserved in the GS' battery-backed RAM.

(2) FORMAT your new /RAM5. This adds the "boot blocks" to the volume. The RAMdisk is otherwise formatted only to

● *continued on page 17*

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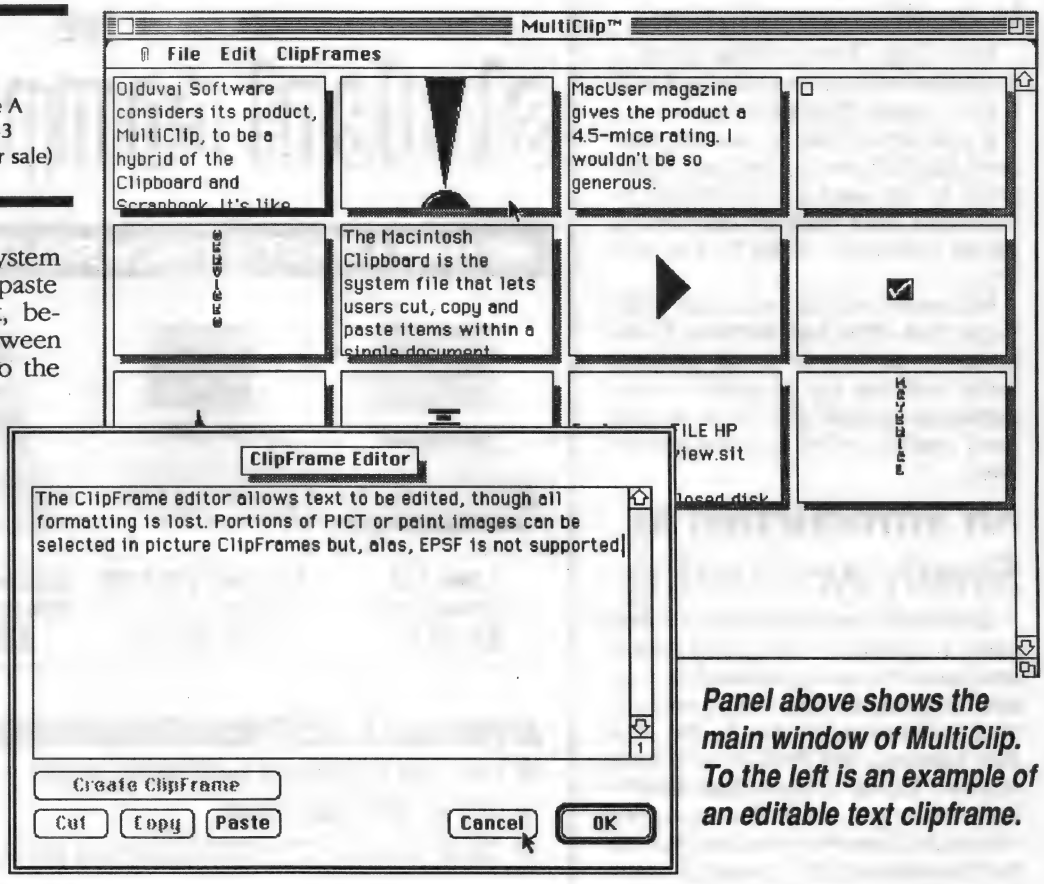
Useful, yes, but no clipboard replacement

MultiClip
Olduvai Corporation
7520 Red Road, Suite A
South Miami FL 33143
Cost: $39US (summer sale)


MultiClip™
File Edit ClipFrames
Olduvai Software considers its product, MultiClip, to be a hybrid of the Clipboard and
MacUser magazine gives the product a 4.5-mice rating. I wouldn't be so generous.
The Macintosh Clipboard is the system file that lets users cut, copy and paste items within a single document
ClipFrame Editor
The ClipFrame editor allows text to be edited, though all formatting is lost. Portions of PICT or paint images can be selected in picture ClipFrames but, alas, EPSF is not supported
Create ClipFrame
Cut
Copy
Paste
Cancel
OK

Panel above shows the main window of MultiClip. To the left is an example of an editable text clipframe.

By Steve St-Laurent

The Macintosh Clipboard is the system file that lets users cut, copy and paste items within a single document, between documents and even between applications. It is fundamental to the Mac operating system.

The Scrapbook is another system feature that allows for the stable storage of text and some types of graphics.

What to make then of a product billed as "a Clipboard and Scrapbook replacement?"

Olduvai Software considers its product, MultiClip, to be a hybrid of the Clipboard and Scrapbook. It's like the Clipboard in that stuff can be cut, copied or pasted directly to or from the MultiClip file without invoking a desk accessory, for example. It's like the Scrapbook in that it can store many items of information. It saves automatically, so you don't run the risk of losing items on a crash. And you can create as many MultiClip files as you like, limited only by disk space.

The Clipboard can't do that; it can only hold one selection at a time. Whenever new information is cut or copied, it replaces anything already on the Clipboard.

MultiClip, which installs as an INIT, saves information in Clipframes, which look much like a SmartScrap window. Text frames can be edited, though any changes will eliminate all formatting. Selections can be made from art placed in picture frames.

MultiClip items can be pasted back into the document in the order they were clipped, in reverse order, individually or by number. In the MultiClip window frames can be re-ordered, duplicated or deleted.

Text or pictures can be imported from Scrapbooks, other MultiClip files and text-only documents.

MacUser magazine gives the product a 4.5-mice rating. I wouldn't be so generous.

To begin with, it's definitely not a Clipboard replacement. It doesn't support Encapsulated PostScript files for starters. To anyone working in publishing this is a major drawback. EPSF files copied to MultiClip return as mere bitmaps.

Nor will it copy HyperCard buttons or fields, so forget it if you're a heavy HyperCard user. It also has trouble with information in Excel.

Olduvai's explanation is that these programs use private clipboards. This is not true. If I copy an EPSF file to the Clipboard in PageMaker, quit PageMaker, relaunch it, then paste from the Clipboard, I get the EPSF file, not just the screen representation. Olduvai dismisses these as non-standard clipboard formats. Fine and well, but the only paint images I ever use are screen dumps. EPSF **is** the standard for serious Mac graphics users.

The document is abundant, perhaps even excessive, for this straightforward utility.

Unless one works a lot with paint and PICT files, MultiClip's prime usefulness would appear to be in intensive word processing. The ability to cut, cut, cut, then paste, paste, paste to re-order sentences or paragraphs is great. No more lost chunks of copy.

Perhaps the biggest grumble is that MultiClip is oversold. It's very useful but is hardly a replacement for the Clipboard.

Cricket Software company sold

Computer Associates, who recently acquired Bedford Software, including Simply Accounting which was demonstrated at the June Mac meeting, have also announced that they are also acquiring Cricket Software.

The software includes: Cricket, Graph, Draw, Paint, Presents, Expression, & Colour Paint.

For additional information contact Tracy Beaufort at 733-2343.

CNIB requests donations of used Apple // s to aid in braille transcription

The CNIB Transcription Services produces braille material using Apple II Plus, Apple 2E or 2C computers.

If you would like to donate your used Apple II series computer to the CNIB to be used by volunteers to transcribe print material into braille, please contact Ms. Edith York at 321-2311.

Minimum requirements are 64K, single disk drive and monitor. Components must be in good working order. Income tax receipts for the donations are available at the current used market value (newspaper ad rates).

An introduction to Simply Accounting

Bedford Software which has recently been acquired by Computer Associates has released an animated demonstration program disk which was created by Motion Works. At the June Mac meeting, two Bedford and three Motion Works (HyperCard specialists) folks put on a demonstration where chickens were used extensively to demonstrate that the most 'chicken-hearted' computer user can be a Simply Accounting star. The disk is available **free** of charge from Bedford (294-2394), an authorized dealer, or since they sent us a copy, from our public domain librarian (for the normal copying fee I assume). Simply Accounting lists for $449 but may be available for less if you shop around.

These demonstration programs are a friendly and quite useful way for the user to become familiar with the real product while giving the publishers some assurance that they are not giving away the store. (You have been sending in your SHAREWARE fees haven't you?) Note that the commercial program is being emulated, it does not exist on the demo disk. The company can also demonstrate features of the program in an interactive manner which an in store demonstration could miss, while the prospective purchaser can make a list of more detailed questions for the store salesman - not all of us can keep our true requirements in mind while an eager salesman is looking over our shoulders.

System requirements are: 1 MB Mac, 800K external or hard drive, system file 4.2, finder 5.3 and HyperCard 1.2.2 (or later versions).

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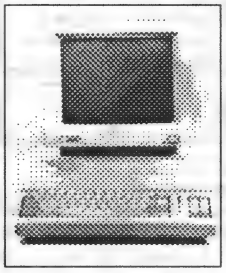

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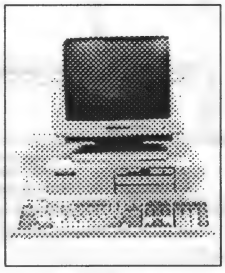

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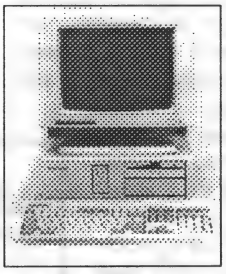

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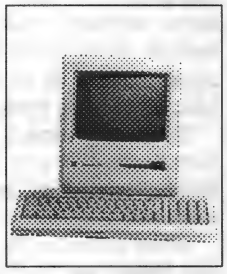

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Workstations and the musculo-skeletal system

By Dr. W.E. Kelsick, D.C.

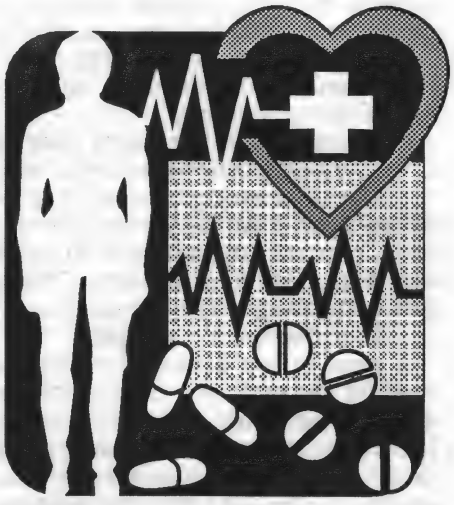
The burst of technological developments in computer systems is similar to the rapid developments and changes of the Industrial Revolution in the late 18th and early 19th century. In an incredibly short time, computers have become a part of normal office equipment in the same way that pens, pencils, erasers and chairs are part of normal office equipment. This rapid change in technology has led to enormous changes in the office environment; however the necessary consideration for the workers has fallen short.

Poor design and the inadequate set-up of computer work stations have led to major concerns for computer users, specifically, the effect on the musculo-skeletal system. The musculo-skeletal system undergoes tremendous stress and strain with the final result of fatigue. The efficiency of the worker is drastically affected as a result of a "domino effect" of this poor working environment which causes fatigue, which in turn leads to irritability which will eventually cause a decrease in performance of the worker. In turn this will lead to psychological effects which will cause increasing unhappiness and / or discontent. This is followed by a decrease in productivity with the obvious outcome of reduction in profits and benefits derived from the final product.

The Physiological correlation of work and the Musculo-skeletal system.

Adequately to explain muscle stress and strain it should be understood that muscles can perform two types of work, namely DYNAMIC WORK and STATIC WORK. Dynamic work involves movement such as walking, lifting, and carrying objects. Static work does not involve any movement. However, the muscles are in a contracted state, helping to maintain the body's postural position. Jobs which involve holding things in the arms for an extended period of time or standing in one place for a long time without movement are examples of static work. To visualize static work, consider a hovering helicopter. The propellers are moving and the helicopter is burning energy yet it is not moving.

Static work is not efficient. It is more strenuous than dynamic work; it needs higher energy consumption which causes an increase in oxygen intake, and an increase in heart rate. Static work causes stress to the musculo-skeletal system which leads to ligamentous and muscu-



lar fatigue. Fatigue leads to irritation, swelling, and pain. Users experiencing distress developed from static work usually complain of generalized body aches. People who are involved in jobs requiring static work require longer rest periods than people who do dynamic work. The majority of the activity which occurs at the computer work station is static or almost static in nature. Because of the constraints and the awkward posture associated with such a working environment, musculo-skeletal complaints from these workers are ever increasing. In a nutshell, static work places tremendous stress and strain on the musculo-skeletal system as compared to dynamic work.

Bio-Mechanical consideration at computer work stations

As previously mentioned, there is considerable increase in the use of computer work stations, hence specific consideration should be given in the design of such working environments. Adjustability of the equipment used is of absolute importance in designing the work place, since no two workers are of the same body type. The sitting posture of the worker determines how the work place should be organized. The following antroprometric variations are crucial considerations in determining work place design:

- table height (key board height)
- viewing angle (eye to screen centre), which determines neck flexion
- visual distance from the screen (eye to screen)
- seat height and width
- seat back inclination
- elbow flexion (90 degrees)
- shoulder flexion/angle (as low as possible). Therefore the equipment must be adjustable, particularly the screen (height and distance), and the keyboard (for maintaining wrist extension/flexion ulnar deviation a minimum).

Other considerations include:

- esthetics
- adequate lighting to reduce the glare which may cause increased eye fatigue and irritability.
- fresh circulating air. to ensure that the room would contain a minimal amount of stale air which tends to cultivate bugs (viruses).
- a low noise level maintained to allow proper concentration. These recommendations result in decreased fatigue, decreased irritability, increased comfort, and increased efficiency leading to an increase in productivity.

Sitting at the work station

The "sitting work place" is at present the most common one in the industrial world. It would seem appropriate then to examine sitting posture since it is one of the most important activities which occurs at the computer work station. Sitting may be defined as a body position in which the weight of the body is transferred to a supporting area, mainly the issual tuberosities (bones in the buttocks), the pelvis and the surrounding soft tissues such as muscle, fat, and ligaments. (Schoberth 1962) When the biomechanical aspects of sitting are given consideration, the spine is of particular importance. However, the lower and upper extremities must also be considered. The basic shape of the spinal curves should be noted, i.e: the cervical and lumbar lordosis (C-shaped curve) and the thoracic kyphosis (backwards or reverse C-curve).

There are three different types of sitting postures: middle, anterior, and posterior.

1. In the middle posture, the centre of mass (centre of gravity) is directly above the issual tuberosity (bones in the buttocks) and the floor supports 25% of the body weight.

2. The anterior posture can be achieved by leaning forward from the middle posture and the centre of mass is then in front of the issual tuberosities and the floor supports more that 25% of the body weight.

● *continued next page*

Body offers clues on workspace set-up

● *continued from page 15*

3. In the posterior posture (backward leaning) less than 25% of the body weight is supported by the floor, and the centre of mass is behind the issual tuberosities. It should be borne in mind that the muscles of the posterior thigh, because of the connection to the pelvis, hip and knee joints, have great influence on the configuration of the lumbar spine during sitting. Location and slope of the work area have a major influence on the postures of the neck, shoulder, and upper extremities when sitting work is performed.

Generally the posture of a seated person at the work station depends not only on the design of the chair, but also on the individual's sitting habits and on the task to be performed. Posterior sitting positions are assumed in chairs with large back rests that incline and are often preferred for resting; anterior sitting on the other hand is adopted most often when desk work is performed. The height and the inclination of the seat of the chair, combined with the position, shape and inclination of the back rest and the presence of other types of support will influence the resulting posture. It is imperative to provide not just a good chair, but a chair that is functionally adapted to the task of the occupant.

Sitting and the spine

There are several indications that sitting can cause back pain. The load on the spine increases when sitting without a lumbar support, compared with standing. The most important factor in reducing low back stress is a back rest, and the most important parameter is in the back rest design is its inclination angle. With the addition of a separate lumbar support, it is possible to achieve a more normal lordotic curvature where sitting stress on the lumbar spine can be further reduced, especially when sitting upright. To maximize comfort, such supports should be adjustable in height and size. Support for the arms and proper seat height have been shown to reduce low back stress.

Sitting and the shoulder

The shoulder joint represents one of the most complex biomechanical structures in the body. The ball and socket arrangement of this joint provides a large amount of mobility for the arm. There are also six additional joints in the "trunk arm complex" (the shoulder girdle) which enhance mobility. However, with such extreme mobility, intrinsic stability of the shoulder joint has been sacrificed. This stability depends on the ligaments, joint capsules and extensive musculature of the upper torso.

Arm work where the hands have to reach frequently or be held above shoulder height for sustained periods is highly discouraged. Jobs that require such elevated arm activities will lead to rapid muscle and ligamentous fatigue. This in turn leads to degenerative tendonitis and bursitis in the shoulder complex.

A work surface above elbow height requires the angle of the elbow to decrease or the shoulder to be abducted or lifted. Such posture will increase the stress on the shoulder joint complex as well as on the muscles of the shoulder and neck region. Hence, fatigue follows.

Sitting and the legs

In order better to distribute and to reduce load (stress) on the buttocks and on the back of thighs, leg support is of critical importance. The leg should rest firmly on the floor or on a foot support so that the weight of the user's legs is not supported by the back of the thighs resting on the seat. When pressure is applied to the thighs close to the knees it can create clinical problems in terms of swelling of the leg and pressure to the sciatic nerve. Over the work day the leg increases in volume by 4% (Winkle 1878/1981). However, by allowing movement every 15 minutes swelling was reduced to 2.3%.

Finally the advantages of providing normal sitting posture are:

1) It provides the stability required on tasks with high visual and motor control.

2) Sitting is more energy efficient than standing.

3) Less stress is placed on the lower extremity joints.

4) Hydrostatic pressure on the lower extremity circulation is lowered.

Sitting offers many advantages, however the sitting work environment needs careful planning and designing in order to reduced the musculo-skeletal strain and stress on the worker.

Conclusion

It is known that localized musculoskeletal injury can be caused by sustained or frequent exertions. Initially there may be simple acute muscle fatigue. As the causal condition persists, inflammation of tendons, synovia, bursa, and adjacent joint structures result in more severe and chronic symptoms and functional limitations.

In order to limit such accumulative trauma, several considerations are necessary in work place designing.

1) It should be recognized that muscular strength is quite limited in certain postures; any exertion in these weaker postures will require the muscle to work at the maximum capacity or close to it, leading to states of high fatigue.

2) Muscles are not able to maintain static contraction over 15-20% of their strength without fatigue, for example: stooping over, reaching above the head, leaning to on side, standing on the foot, etc. Length of rest between contractions is important in prolonging each endurance time.

3) Fatigue in muscle loads is associated with postural requirements, which in turn are dependent upon the degree of matching between the work place, machine control, display layout dimension, and individual worker's antroprometry. Future work places and machine designs must have a large range of adjustability to accommodate the normal antroprometric variations in the worker populations since no two human beings are identical.

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Miniature golf makes a computer comeback

By Phil Shapiro

The other day the newspaper reported that miniature golf is making a big comeback across the country. It's a wholesome, fun game–suitable for the entire family. And you don't need any great skill to have a good time.

Well, miniature golf is also making a comeback on the good old Apple II. A fantastic public domain version of miniature golf is available from the Big Red Computer Club, a national Apple II user group. (More about the Big Red Computer Club later.) The game comes complete with water traps, windmills, and other lurking dangers. You can play against other players, or play against yourself. The program keeps track of your score as you navigate the pits and crevices of the ten holes.

Playing the game is really quite simple. You "point" your golf stick by using the left and right arrow keys. As you depress these keys, an arrow spins around on the screen. When your arrow is pointing in the direction you want the ball to go, you give the ball a hit by pressing one of the number keys.

To give the ball a gentle nudge, simply press number 1. To give the ball a giant whack, simply press number 9. All the intermediate numbers hit the ball with an accordingly intermediate force.

Just as you might expect, the ball goes careening all over the place if you give it a hard hit. The kid in you will take great joy in making the ball bounce all over the screen on your first game. As you gain experience, and aim for the best score possible, your miniature golf skills will naturally become more refined and restrained.

What's amazing about this program is that it's very true to life. The simulation of real motion is uncanny.

The golf balls move on the screen just as you would expect a real live golf ball to move. We're talking Newtonian laws of motion here.

The ball speeds up when it goes down ramps, slows down when it goes up ramps, and goes splat when it falls into a water trap. And some of the holes have multiple sections to them: you first shoot for one hole, and then you get thrown into another part of the screen to aim for another hole. This game is just like the real thing!

So anyway, here's a couple of free tips in playing the game:

- At the opening screen, when you see the words Miniature Golf in big letters, you need to press the space bar to move on.

- Hole number 3 is a killer. Do you see that revolving windmill right in front of where you want to go? Take a couple of small shots to steer around the windmill. Otherwise you'll be chasing golf balls into the next century.

On the other hand, you can really let loose on the first shot of hole number 6. Just aim the ball anywhere over to the right. The ball has nowhere to go but down that nice curved, downward ramp. Isn't that fun?!?

At the end of the game, the score(s) for each player(s) is shown. Then the game starts over again with the first hole. A good score for beginners is about 65. If you score under 45 for ten holes, you're about ready to go on the professional golf circuit.

One final note about playing this game with friends. Although the program allows you to play a multiple player game, you might want to opt for the single player game, and take turns on each of the holes. Otherwise you'll spend all your time taking turns with everybody else on each hole. And besides, miniature golf is not supposed to be competitive anyway. If you play the holes consecutively, and cooperatively, you might end up having more fun in the end.

Now, about getting a copy of Miniature Golf.

The Big Red Computer Club (formerly called the Big Red Apple Club), allows non-members as well as members to purchase public domain software at very reasonable prices. The Miniature Golf program is on disk G24, Miscellaneous Games.

The price is $3.50, including shipping. Members pay the same price as non-members. (Nebraska residents need to add 4% sales tax.)

The address of the Big Red Computer Club is: 423 Norfolk Ave, Norfolk, NE 68701. You can also call B.R.C.C. at (402) 379-4680, and charge your order to Visa or MasterCard.

If you're interested in membership in the Big Red Computer Club, dues run at about $20 a year. Benefits include receiving the monthly club newsletter, Scarlett, as well as discounts on commercial software, hardware, and books. Typical discounts run from 10% to 40% of suggested retail price. The articles in Scarlett are mostly non-technical, including a goodly number of software reviews, question and answer articles, and editorials.

If you're serious about getting the most out of your Apple II, joining the Big Red Apple Club is highly recommended. Also, it's nice for Apple II users to go beyond local groups in helping each other out, and organizing ourselves into a forceful interest group

(i.e. a group that Cupertino cannot casually ignore).

If you're not interested in membership, but would like to find out more about the club's public domain software, you can request a free copy of the most recent B.R.C.C. public domain catalog. The 1989 public domain catalog lists most of the recent public domain acquisitions, but not the entire B.R.C.C. public domain library.

(The author teaches computers in elementary school, and develops educational software for the Apple II and compatibles.)

GS RAM Plus card

● *continued from page 12*

function as a data volume.

(3) Copy your GS/OS system disk, file by file, over to /RAM5, or use the INSTALLER program on the /SYSTEM.TOOLS/ disk to "copy everything possible". The latter is the recommended method. The former works, but make sure you use System 5.0 when you're copying 5.0.

(4) Copy any additional DA's and applications that you'll want, into the appropriate folders of /RAM5. Make good use of folders to avoid the ProDOS limit of 51 files in the root directory and to keep your volume manageable. If you're using Finder, don't forget your ICONS folder.

(5) Enter the Control Panel's "Slot" function, and select "RAM disk" as your Startup Slot. Now do a warm reboot (press Apple-Control-Reset), and watch GS/OS fly!

When you're happy with your RAMdisk, use ProSel's Backup utility to save it to floppies. When you next power up, boot into ProSel-16 on a 3.5, enter Restore, and answer "Yes" when asked "Do you want to erase /RAM5?" (this reformats the RAMdisk). Finally, reset the Startup Slot to "RAMdisk", and do a quick warm reboot.

I'll admit that aside from the speed aspect, a hard disk would be simpler and more useful.

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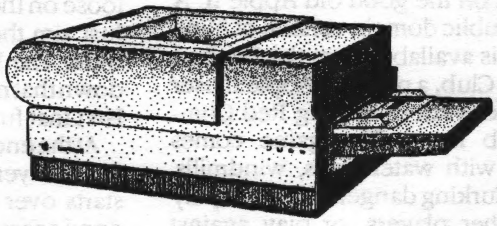

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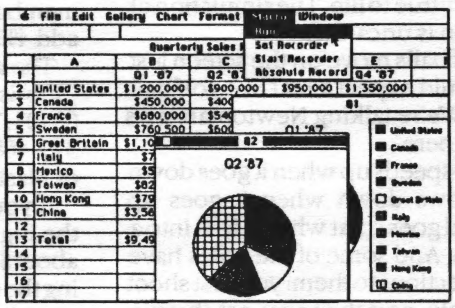

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PHONE: **Steve** at 255-3238 or (ABC BBS #9)

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1 Meg. SIMMS
This is a set of four 256K SIMMS taken out of the club's Mac SE. We would like to get $250 for the set. If you are interested give one of the executive a call, or call **Ib** at: 299-9597 or (ABC BBS #2)

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FOR SALE

I have an **Applied Eng. GS RAM** card available, containing the basic 256K. With RAM prices dropping steadily, you should be able to fill this baby relatively cheaply in the near future. Move 3 banks of the chips from your Apple GS Memory card over, and you have the 1MB that you started out with, plus space for a further 512K. I think $200 should be a pretty good price for this one. Call **Lorne** at 467-6062, or (ABC BBS #7).

Roland 1111 printer, Amdek 300A monitor, Mitac disk drive, //+ comp. CPU, disk bank and power bar. $500.00 o.b.o. Call **Brian Plumridge** at 526-4155 after 6:00 pm

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Internal **Clock Card** for Apple //+. Will pay up to $30.00. **Noel Allen** (ABC BBS #97) or call 467-9082, ProDOS only please, will pay more if reasonable

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So, does anyone have a **composite colour monitor** available for sale? Preferably used, in great condition, and cheap. I want to be talked into buying one. **Charles Siegel** (#46 ABC BBS) or 228-8727

Wanted buyers for Diskettes
am able to get 3.5" SKC diskettes at $19/per box. I can also get 5.25" SKC disks for $6.00 a box. These disks are completely guaranteed (the 3.5"s too). Any trouble and I'll get a replacement.

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5.25" disks $5.64 + 6% = $6.00
3.5" disks $17.86 + 6% = $19.00

My phone is 590-1480 and I am almost always at the apple II meetings and will bring some along.

Marty Summers (#108 ABC BBS) or 590-1480

RamWorks card for Apple //e, call **Mike Horne** at home: 420-1497, or (ABC BBS #53)

ANNOUNCEMENTS

It is time again to thank the companies that support our club with donations and special prices on products we need to run the club.

Apple Canada who has donated the Mac SE /20 on which this newsletter is produced. An Apple //e with a 10 Meg. hard disk which is being used to run our BBS/information system.

Microsoft (Canada) Inc. who donated MS-Word 3.0 to write the newsletter

Aldus Corporation who sold us PageMaker 3.0 at a special user group price.

Epic Technology who donated a 2400 baud modem to the club to be used on our BBS.

Finally, but not least, the dealers who make donations to us for our events, alphabetically:

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The newsletter is printed on an Apple LaserWriter+ by **Steve St-Laurent**. Steve also gives your Editor help and advice with the page layout.

If you, or somebody you know, need work done in page layout give Steve a call at 255-3238. His rates are reasonable and work is excellent.

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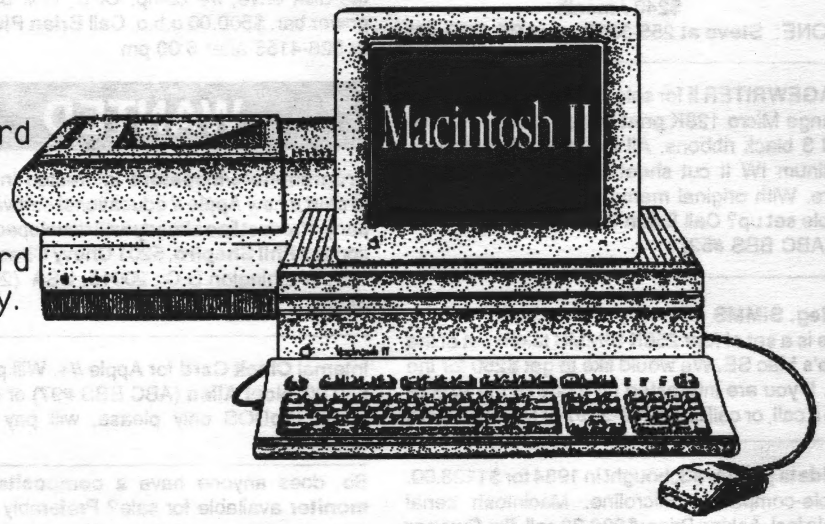

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